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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR         | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|------------------------------|----------------------------|------------------------|
| 10/502,521  | 07/26/2004  | Hendricus Clemens De Ruijter | NL 020054                  | 5416                   |
| 24737 7590 05/17/2007<br>PHILIPS INTELLECTUAL PROPERTY & STANDARDS<br>P.O. BOX 3001<br>BRIARCLIFF MANOR, NY 10510 |             |                              | EXAMINER<br>MATIN, NURUL M |                        |
|   |             |                              | ART UNIT<br>2611           | PAPER NUMBER           |
|   |             |                              | MAIL DATE<br>05/17/2007    | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/502,521

Applicant(s)

DE RUIJTER ET AL.

Examiner

Nurul M. Matin

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 09/19/2005.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The amendment filed April 06, 2007 overcomes the following objection/rejection of the last Office Action:

- a. Objection to the drawing (1) for not labeled as Prior art.

### ***Response to Arguments***

2. Applicant's arguments, see remarks, filed April 06, 2007, with respect to the rejection(s) of claim 1 under 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Prior art and Dolan, US 5533048.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (fig. 1)[hereinafter, refers to as "prior art"] in view of Dolan, US 5533048.

Re claim 1, the prior art discloses a method of extracting data from a received analogue signal, the received analogue signal having a preamble of a predetermined preamble frequency and a predetermined preamble duration, and a data portion with the data, the data portion having a predetermined data rate, the method comprising obtaining a signal representing a DC value ( $V_{dc}$ ) of the received signal (fig. 1, page 1, Para 0003, line 10-11, "the output is therefore the DC value  $V_{dc}$  of the output from the demodulator"), comparing the received analogue signal to the signal representing a DC value ( $V_{dc}$ ) of the received signal (fig.1, page 1, Para 0003, line 22-24, "The comparator thus receives directly the analogue demodulated signal and the DC component thereof"), and generating, in dependence on the comparison of the received analogue signal to the DC value ( $V_{dc}$ ) of the received signal, a digital bit stream (fig.1, page 1, Para 0003, line 22-26, "The comparator thus receives directly the analogue demodulated signal and the DC component thereof. The output of the comparator is a digital bit stream representing the data in the analogue demodulated signal"). The prior art fails to teach that the received signal is filtered so as to reject the predetermined preamble frequency. However, Dolan does (col.4, line 21-26, "The apparatus further includes a filter that receives a receiver output signal from the receiver and that filters out the pilot component of the composite signals received by the receiver from the transmitter. Preferably, the filter is a notch filter having a notch at the frequency of the pilot tone").

Therefore, taking the combined teaching of Prior art and Dolan, as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the

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arrangement of the received signal is filtered so as to reject the predetermined preamble frequency as taught in Dolan into Prior art to remove the preamble frequency or pilot frequency for synchronization).

Re claim 2, Prior art and Dolan references teach a method according to claim 1, and Prior art references also teaches the signal representing a DC value ( $V_{dc}$ ) of the received signal is obtained using a low pass filter (fig 1, page 1, Para 0003, line 8-11, "The low pass filter has a 3 dB cut-off frequency well below the preamble frequency and the data rate, and the output is therefore the DC value  $V_{dc}$  of the output from the demodulator").

Re claim 3, Prior art and Dolan references teach a method according to claim 2, and Prior art reference also teaches the low pass filter is switchable between a first cut-off frequency and a second cut-off frequency lower than the first cut-off frequency, and that during reception of the preamble the low pass filter is switched to the first cut-off frequency, and that during reception of data the low pass filter is switched to the second cut-off frequency (fig.1, page 1, Para 0003, line 8-22, The low pass filter has a 3 dB cut-off frequency well below the preamble frequency and the data rate, and the output is therefore the DC value  $V_{dc}$  of the output from the demodulator. The low pass filter is a first order RC filter with two resistors R1 and R2 in series and a switch connected in parallel with one of the resistors. During reception of the preamble, the switch is closed, whereby the low pass filter is determined by the resistor R2 and the capacitor C, which gives a short time constant that enables reasonably fast settling of the data slicer within the preamble time frame. After reception of the preamble the switch is opened, whereby

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the low pass filter is determined by the resistors  $R1+R2$  and the capacitor C, which gives a longer time constant and a lower cut-off frequency and thus a stable DC value and also good noise suppression").

Re claim 4, Prior art and Dolan references teach a method according to claim 1, and prior art references also teaches that the received analogue signal is a demodulated signal (fig.1, page 1, Para 0003, line 1-3, "FIG. 1 shows a receiver with a conventional data slicer circuit with a demodulator receiving a radio frequency signal from a receiving antenna").

Re claims 5, which claim the same subject matter as recited in claims 1.

Therefore, claims 5 has been analyzed and rejected with respect to claims 1.

Re claims 6, which claim the same subject matter as recited in claims 3.

Therefore, claims 6 has been analyzed and rejected with respect to claims 3.

Re claim 7, Prior art and Dolan references teach a data slicer circuit according to claim 5, and Dolan reference also teaches that the filter for rejecting the predetermined preamble frequency is a notch filter (col.4, line 21-26).

Re claim 8, the combination of the Prior art and Dolan as a whole also teach that that the notch filter is a first order notch filter with a 3 dB bandwidth equal to its frequency of maximum rejection (Prior art, page 1, Para [0005]).


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nurul M. Matin whose telephone number is 571-270-1188. The examiner can normally be reached on mon-fri (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nurul Matin

  
MOHAMMED GHAYOUR  
SUPERVISORY PATENT EXAMINER